



I. DEPARTMENT/AGENCY

Louisiana Community and Technical College System

II. PROJECT TITLE

Moving Student Administrative Services to the Next Level

III. PROJECT LEADER

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IV. EXECUTIVE SUMMARY

The Louisiana Community and Technical Colleges System in partnership with 4 of its 7 community colleges, its 40 technical colleges and its 2 technical/community colleges located throughout the state is submitting this request for a project to provide **internet based** student administrative services (student records, registration, student finances, advisement, recruitment and financial aid) to the students, faculty, and staff of the LCTCS as well as the citizens of Louisiana.

The LCTCS proposes a twelve-month project to upgrade its PeopleSoft client/server platform to PeopleSoft's Pure Internet Student Administration platform to manage the entire life cycle of LCTCS students, faculty and staff over the Internet. With PeopleSoft's Pure Internet Architecture all transactions are built into common Web pages so that information is accessible anytime, anywhere, from any browser.

The amount of funds requested is \$1,000,000 and the estimated operational date is Fall semester 2004 with a pilot launched for Summer semester 2004.

V. DESCRIPTION OF THE PROJECT

a. Project Narrative

The purpose of this project is to provide a pure Internet student administration services environment for students, faculty, staff and Louisiana citizens soliciting educational and training services from the LCTCS. When successfully implemented this project will allow students and citizens to register, pay for services requested, apply for student financial aid, query grade status, request transcripts, and communicate with faculty and staff via the Internet 24 by 7.

The goals of the project are:

- i. To provide one stop shopping and provision of services accessible to all through a common gateway portal accessible via Internet browser.
- ii. To ensure that the aforementioned services are available reliably 24 by 7.
- iii. To establish a unified technical platform capable of supporting and sustaining the missions of both technical and community colleges.
- iv. To streamline student administration service delivery in a manner conducive increased student and citizen satisfaction.

The proposed solution will allow the LCTCS and its institutions to serve its students and the citizens of Louisiana in a consistent, convenient and timely manner statewide. Forty-six of the forty-nine sites in the LCTCS representing some 30,000 plus students in almost every parish in Louisiana will be served by this solution as well as Louisiana citizens and business persons desiring to take advantage of LCTCS services.

b. Use of Innovative Technology

The proposed solution is a particularly innovative approach to making student administrative services readily and reliably available to the LCTCS audience primarily because of its Pure Internet Architecture. PeopleSoft Internet Architecture is a server-centric, component architecture that enables secure end user access to PeopleSoft student administration applications. Any Internet enabled device, such as a web browser running on a PC or cell phone—which uses standard Internet technologies such as HTML, XML, and HTTP—can access and execute PeopleSoft Internet Applications. Other innovative technology points include:

- **Easy Access**—A user should be able to access the application by simply entering a URL in the address bar or clicking on a hyperlink—all using a standard web browser without additional software requirements.
- **Platform Independence**—If a device can access the Internet and be used to interact with leading websites, it should be able to interact with PeopleSoft applications just as easily. Any mobile Internet access device, such as a cell phone or PDA, should be able to interact with the PeopleSoft application.
- **Content Management**—The majority of the content delivered over the web is unstructured data. PeopleSoft Portal technology—a key component of the Internet Architecture—manages the delivery of both structured (transactional) and unstructured data.
- **Low Bandwidth Access**—The majority of web access today occurs over dial-up phone lines. To accommodate this constraint, PeopleSoft designed Internet access to support applications effectively over low bandwidth connections. In addition, the network impact of deploying internet-enabled PeopleSoft applications is minimal, allowing companies to leverage their existing information technology infrastructure for providing wide-scale client access.
- **Low Cost of Maintenance and Deployment**—One of the biggest issues with client/server implementations is the cost involved in deploying applications to a large end-user base. The PeopleSoft Internet Architecture allows customers to deploy applications at the lowest possible cost. In addition, it provides customers with the flexibility to customize their applications without the deployment and maintenance issues associated with a client/server implementation.
- **Secure Access with Easy Administration**—Robust security is a crucial requirement for Internet applications. However, the administrative cost and effort to create and maintain security profiles for thousands of end users is often ignored by application vendors. Directory Server integration in the PeopleSoft Internet Architecture addresses this issue by allowing customers to manage all of their end-user security profiles in a centralized repository. This enables simplified access and administration for PeopleSoft Internet applications along with other directory services third-party systems.
- **Robust Server Architecture**—Providing a large number of end users with access to applications should not require an inordinate number of servers. The robust, scalable, high-performance PeopleSoft Internet Architecture scales to support access for not only full-time users, but large populations of occasional and external users as well.

This project differs from the typical student administration application because unlike traditional student administrative service delivery mechanisms, many of the painful nuances normally associated with traditional methods of student service delivery will be eliminated with deployment of the PeopleSoft Pure Internet Student Administration system. Implementation of the system will provide the LCTCS with a student service delivery mechanism that fully exploits the innovative capabilities of the Internet and creates a service model and environment in synch with the requirements of today's student, citizen or business person.

c. Multi-agency Application or Portability to Other Agencies

By its very nature, this is a multi-agency application. Implementation includes 4 community colleges, 40 technical colleges and 2 technical community colleges. All will be operating from a centralized database server platform via a single portal.

d. Benchmarking Partners and/or Best Practice References

Kentucky Community and Technical College System
Virginia Community College System
University of Louisiana Southeastern

e. Long-range Planning

This project is the heart of the LCTCS Common Information Management System project. The goal of CIMS is to provide a common technical platform for LCTCS institutions consisting of a software application capable of delivering student administration, human resources and financial services to the LCTCS and its customers as well as the Wide Area Network infrastructure on which it is carried.

This project also ensures that the strategic goals of providing the citizens of Louisiana with appropriate education, training and student services at moderate cost, convenient times and accessible locations to increase their success in certificate, diploma, associate or baccalaureate studies or in the State's workforce and making effective use of new and emerging technology to improve teaching and learning in the Systems' classrooms, laboratories, and telecommunication networks are realized.

f. Performance Goal

The key to success of the proposed solution is the extent to which it provides the information and services that meet the needs of LCTCS students, potential students, citizens and business persons. The success of the system for the three years following implementation will be measured based on the following indicators:

Indicator Name	Indicator Value
Percentage of students registering via the Internet.	FY 2004/2005 – 50% FY 2005/2006 – 70% FY 2006/2007 – 90%
Percentage of students accessing the portal.	FY 2004/2005 – 50% FY 2005/2006 – 70% FY 2006/2007 – 90%
Percentage of students accessing student records via the Internet.	FY 2004/2005 – 70% FY 2005/2006 – 80% FY 2006/2007 – 90%

g. Technical Approach

- i. Technical description – This project will require minimal technical changes that will be easily absorbed into the to the existing LCTCS PeopleSoft technical environment. The noted difference is the introduction of a high-end web server to support the PeopleSoft Internet Architecture.

The LCTCS is currently running the client/server version of PeopleSoft Finance, Human Resources and Student Administration in a Microsoft Windows 2000 environment. All servers are running Windows 2000 and all workstations/pc's are running the PeopleSoft client on the Windows 2000 operating system. All PeopleSoft clients utilize TCP/IP to connect to the central server.

- ii. Interoperability – PeopleSoft Internet Architecture is marketed as “An Open Architecture for Internet Access and Integration.” As previously mentioned PeopleSoft Internet Architecture is completely focused on the Internet to provide powerful new functionality for Internet based access and integration.
- iii. Scalability - Providing many end users with access to applications does not require an inordinate number of servers. PeopleSoft's Internet architecture scales to support access not only for full-time users but also for large numbers of occasional and external users. Application load balancing can also be provided across the server tiers.

The PeopleSoft architecture has distinct tiers that make it easy to scale as needed. In fact, scaling up can be a seamless process that creates little disruption to a production system. Using Tuxedo from BEA Systems facilitates this process because it is a stateless application server. The leading distributed-transaction monitor in the marketplace, Tuxedo has been part of the PeopleSoft architecture for many years and has proven scalability. Tuxedo also provides built-in failover, load balancing,

dynamic spawning, monitoring, encryption, and compression capabilities. At the Web server level, scalability is simply a matter of adding additional servers and installing and configuring the Java servlets.

- iv. Maintaining the System – The introduction of the PeopleSoft Internet Architecture will bring about dramatic cost savings in support and maintenance efforts. The server centric nature of the product removes the burden of client specific support from support personnel as well as the end-user. No code on the client means new users can start working as soon as they have an ID and password instead of also having to wait for an install. No code on the client will ease troubleshooting.

h. Implementation Approach

Implementation of the proposed project will be performed via a number of tightly related tasks. The tasks are: (1) procurement, (2) analysis, (3) installation, (4) testing and training, (5) pilot deployment, and (6) production cutover. A detailed project schedule will be developed during the analysis phase.

1. Procurement - Three procurement activities will be used to obtain the professional and support services, software components, and equipment required to implement the project.
 - i. The first procurement activity will select an integrator who will provide the professional services required to refine the detail design and to conduct the development and integration activities required for the project.
 - ii. The second procurement activity will obtain the software components required for the project. This procurement will also include any vendor training, vendor installation support, and maintenance support necessary.
 - iii. The third procurement activity will be used to obtain the additional hardware and support services necessary for full implementation of the project.
2. Analysis – An integrated work plan and detailed project and deployment schedule required to implement the project will be the by products of this stage.
3. Installation – Software and hardware installation and testing in preparation for deployment will occur in this phase.
4. Testing and training – In this phase, testing and training in accordance with the project requirements will be performed.
5. Pilot deployment - In this phase, the LCTCS will execute a pilot deployment of the system 1 semester prior to going live.
6. Production cutover – Upon successful and satisfactory completion of the pilot the system will be rolled out to the institutions as planned.

i. Assessment of Risks

The risks involved with this project are minimal. An informal survey of the deployment of PeopleSoft Architecture at like institutions has yielded nothing less than praise for the product. The LCTCS has also solicited feedback from the Higher Education User Group (HEUG), a non-profit organization of higher education PeopleSoft institutions and users regarding their experiences with the technology. These experiences have been analyzed and will be used as a watch list during project implementation.

j. Integration with Existing Technologies

The proposed system will integrate directly into the current LCTCS PeopleSoft system and will be deployed using existing LCTCS support, staffing and infrastructure resources.

k. Project Budget and Costs

i. Equipment

Internet Application Server. Includes the cost to purchase and install one eight-way processor server to host the portal database and the Internet Application Server engine.

<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Application Server	1	\$ 80,000	\$80,000
Total equipment cost			\$80,000

ii. Software

PeopleSoft Enterprise Portal. Includes fees for license and five year maintenance for portal software.

<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Portal Software	1	\$ 41,000	\$41,000
Software maintenance	5 yrs	\$ 8,200	\$41,000
Total software license and maintenance costs			\$82,000

iii. Telecommunications

This project will utilize networking and telecommunications systems already in place or planned by the LCTCS.

iv. Professional/Contracted Services

Implementation Services. Includes fees for professional services, which will be required to lead the LCTCS through production deployment. It is estimated that 2,900 hours of consulting services are required.

<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Implementation services	2875hrs	\$ 220	\$632,500
Total professional services costs			\$632,500

v. Other

Training. Includes fees for the cost of training faculty, staff and students.

<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Implementation services	548 units	\$ 375	\$205,500
Total professional services costs			\$205,500

vi. Funding Requested

Funding Category	Total Cost	Other Sources	Funding
Equipment	80,000	0	80,000
Software	82,000	0	82,000
Professional Svcs	632,500	0	632,500
Other	<u>205,500</u>	<u>0</u>	<u>205,500</u>
Total	\$1,000,000		\$1,000,000

k. Cost/Benefit Analysis

The LCTCS through the implementation of PeopleSoft's Pure Internet Student Administration platform expects to experience the following cost saving benefits upon full deployment of the software:

1. Easy Access.
2. Low Bandwidth Access
3. Low Cost of Maintenance and Deployment
4. Secure Access with Easy Administration

